REMARKS

Applicants submit this Amendment in response to the Office Action mailed on December 29, 2004.

The claims have been amended as follows. Claim 26 has been amended to clarify that the polypeptide contains a repeat sequence of at least 16 glutamine residues. Claim 52 has been amended to substitute the equivalent term "non-aggregated" for the term "monomeric", in response to the finding by the Examiner that the term "monomeric peptide" is not definite. Claim 52 has been further amended to clarify that the peptides are incubated in a frozen solution. Claim 53 has been added. Support for claim 53 is found in the specification on page 15, line 7.

In this Amendment, claims 13-20 and 27-29 have been indicated as withdrawn.

Rejections of the Claims

I. Rejections under 35 U.S.C. §112, second paragraph, for indefiniteness

A. Claim 26

The Examiner has rejected claim 26 as being indefinite for its recitation of "Q_{16}". Applicants have amended this claim as indicated above and submit that the amendment overcomes this basis of rejection of this claim. The Examiner is requested to withdraw the rejection of this claim on this ground.

B. Claim 52

The Examiner has rejected claim 52 as being indefinite for its recitation of "monomeric peptide". Applicants submit that this term is not indefinite. In several locations in the specification, such as at page 3, line 12 and at page 8, line 6, the term "monomeric" is defined

as meaning "non-aggregated". However, in order to facilitate prosecution of the application, Applicants have amended claim 52 to replace the term "monomeric" with the equivalent term "non-aggregated". Applicants submit that claim 52, as it existed previously and as it now exists, is not indefinite and request the Examiner to withdraw the rejection of this claim on this ground.

C. Claim 52

The Examiner has rejected claim 52 as being indefinite for its recitation of "incubating the frozen peptides in a frozen state". Applicants have amended claim 52 to replace this term with the term "incubating the peptides in the frozen solution". Applicants submit that claim 52, as amended, is not indefinite and request the Examiner to withdraw the rejection of this claim on this ground.

II. Rejection under 35 U.S.C. §102(b)

The Examiner has rejected claims 21-25 and 50-52 under 35 U.S.C. §102(b) as being anticipated by the disclosure of Harper, Biochem., 38:8972 (1999). Applicants traverse the rejection of these claims on this ground.

The Examiner, in the Office Action on page 3, paragraph 4, stated that "Harper et al. teach assembling synthetic Aβ peptides containing polyglutamine sequence into filament to study neurodegenerative disease, e.g. Alzheimer's disease."

Applicants respectfully submit that the Examiner has erred because Aβ peptides, such as taught by Harper, do not contain a polyglutamine sequence. Thus, Harper does not disclose a synthetic peptide containing a polyglutamine repeat sequence as called for in the present claims. Applicants submit herewith a schematic diagram of the Aβ peptide which was

obtained from the website of Expert Reviews in Molecular Medicine, at www.expertreviews.org. As can be seen from the diagram, the Aβ peptide contains a sequence of 42 to 58 amino acids and that this sequence does not contain a polyglutamine repeat sequence, as called for in the present claims.

Accordingly, Applicants submit that the rejection of claims 21-25 and 50-52 as being anticipated by the disclosure of Harper is improper and the Examiner is requested to withdraw the rejection of these claims on this ground.

III. Rejection under 35 U.S.C. 103(a)

The Examiner has rejected claim 26 under 35 U.S.C. §103(a) as being obvious in view of the combined disclosure of Harper, Biochem., 38:8972 (1999) and Paulson, Neuron, 19:333 (1997). Applicants traverse the rejection of this claim on this ground.

As discussed above, the disclosure of Harper is not pertinent to the present invention because Harper discloses Aβ peptide, a peptide that does not contain a polyglutamine repeat sequence. Paulson discloses that polyglutamine repeat sequences play an important role in pathogenesis and that those having a higher repeat value, ie 61-84, are typically present in affected individuals. Paulson does not disclose an in-vitro produced aggregate comprising polypeptides containing a polyglutamine repeat sequence.

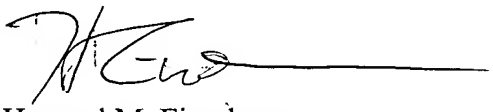
Applicants submit that claim 26 is not obvious in view of this combined disclosure. Neither Harper, nor Paulson, nor the combination of Harper and Paulson, disclose or suggest the in-vitro produced aggregate as called for in the present claims.

Accordingly, Applicants submit that the rejection of claim 26 as being obvious in view of the disclosures of Harper and Paulson is improper and respectfully request the Examiner to withdraw the rejection of this claim on this ground.

Conclusion

Applicants submit that the claims, as amended herein, are in condition for allowance and request an early notice to that effect.

Respectfully submitted,



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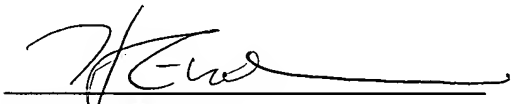
CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on January 31, 2005.

Dated: 1/31/05



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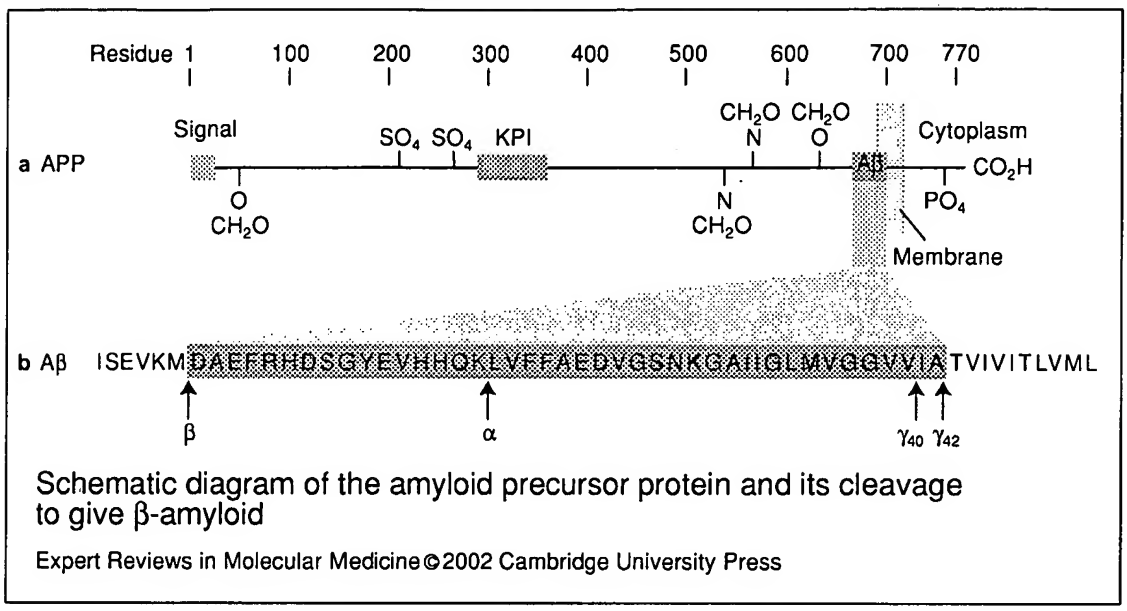

Schematic diagram of the amyloid precursor protein and its cleavage to give β-amyloid

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Figure 1. Schematic diagram of the amyloid precursor protein and its cleavage to give β-amyloid. (a) Amyloid precursor protein (APP) is an integral membrane, proteoglycan-like molecule of approximately 700 amino acids; sulphation (SO_4), phosphorylation (PO_4) and carbohydrate attachment (CH_2O) sites, the Kunitz-type protease inhibitor domain (KPI) and the secretory signal sequence ('Signal') are shown. (b) The protein is proteolytically processed by secretases in several different pathways. Cleavage of APP at the β and γ sites, which define the β-amyloid (Aβ) peptide, generates Aβ sequences of 40 or 42/43 residues (amino acids in single-letter code). The most common cleavage by α-secretase precludes Aβ formation **(fig001dss)**.

Schematic diagram of the amyloid precursor protein and its cleavage to give β-amyloid

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